

REMARKS

The outstanding non-final Office Action mailed February 9, 2004 has been carefully considered. Claims 1-27 are now pending in the present application. Reconsideration and allowance of the application and presently pending claims 1-27, as amended, are respectfully requested.

Response to Objections to the Information Disclosure Statement

The Office Action states that the IDS filed on October 1, 2001 and December 3, 2001 did not include a legible copy of each of the US patents. Although Applicants contend that legible copies of the US patents were submitted and were received by the USPTO, as evidenced by the return postcard indicating receipt of the IDS and 16 references on October 1, 2001 and the return postcard indicating receipt of the IDS and three references on December 3, 2001, duplicate copies of all references disclosed in the these originally filed IDSs are attached.

Response to Double Patenting Rejection

In response to the double patenting rejection, Applicants submit herewith a terminal disclaimer pursuant to 37 C.F.R. §1.321(c). Applicants have submitted the terminal disclaimer solely to advance prosecution of the application, without conceding that the double patenting rejection is properly based. In filing the terminal disclaimer, Applicants rely upon the rulings of the Federal Circuit that the filing of such a terminal disclaimer does not act as an admission, acquiescence or estoppel on the merits of the obviousness issue. *See, e.g., Quad Environmental Tech v. Union Sanitary Dist.*, 946 F.2d 870, 874-875 (Fed. Cir. 1991); and *Ortho Pharmaceutical Corp. v. Smith*, 959 F.2d 936, 941-942 (Fed. Cir. 1992).

Response to Objections

The Office Action objected to claims 21 and 27 due to informalities. Claim 21 has been amended to correct the typing error that made claim 21 dependent from the same claim 21. Claim 27 has been amended to correct a typing error. Claims 21 and 27 have been amended to correct typing errors and not for reasons related to patentability. Consequently, Applicants respectfully request that the objections be withdrawn.

Response to 35 U.S.C. §112, Second Paragraph Rejection

Applicants wish to clarify that the foregoing amendment to claim 18 has been made for purposes of better defining the invention in response to the rejections made under 35 U.S.C. § 112, and not in response to the rejections made based on prior art. Indeed, Applicants submit that no substantive limitations have been added to the claims. Therefore, no prosecution history estoppel arises from this amendment. *Black & Decker, Inc. v. Hoover Service Center*, 886 F.2d 1285, 1294 n. 13 (Fed. Cir. 1989); *Andrew Corp. v. Gabriel Electronics, Inc.*, 847 F.2d 819 (Fed. Cir. 1988); *Hi-Life Products Inc. v. American National Water-Mattress Corp.*, 842 F.2d 323, 325 (Fed. Cir. 1988); *Mannesmann Demag Corp. v. Engineered Metal Products Co., Inc.*, 793 F.2d 1279, 1284-1285 (Fed. Cir. 1986); *Moeller v. Ionetics, Inc.*, 794 F.2d 653 (Fed. Cir. 1986).

Rejection of Claims 1-4, 6-8, 10-12, 15-17, 20-25 and 27 under 35 U.S.C. § 102(e)

Claims 1-4, 6-8, 10-12, 15-17, 20-25 and 27 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Cunningham et al (U.S. Patent No. 6,124,806), hereinafter referred to as *Cunningham*. A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. *See, e.g., W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983). Thus, every claimed feature must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102(e). Applicants respectfully traverse this rejection on the grounds that *Cunningham* does not disclose, teach or suggest all of the claimed elements.

Claims 1 and 23

With regard to independent claims 1 and 23, independent claim 1 recites:

1. A site controller adapted to be used in an automated monitoring system configured for monitoring and controlling a plurality of remote devices via a host computer connected to a first communication network, **the site controller configured for controlling communication with the host computer and a plurality of communication devices that define a second communication network associated with the plurality of remote devices**, the site controller comprising:

a transceiver configured to communicate with the plurality of communication devices via the second communication network;

a network interface device configured to communicate with the host computer via the first communication network;

logic configured to:

manage communication with each of the plurality of communication devices, via a first communication protocol, based on one or more communication paths for each of the plurality of communication devices, each communication path comprising one or more communication devices involved in the communication link between the transceiver and each of the plurality of communication devices; and

manage communication with the host computer via a second communication protocol.

(Emphasis added.)

Independent claim 1 is allowable for at least the reason that *Cunningham* does not disclose, teach or suggest the features that are emphasized in claim 1 above.

Specifically, *Cunningham* appears to teach a data collection module that gathers information from sensor interface modules and then transmits “the information to the host module over the commercially available information transmission systems.” Column 4, lines 60-62. The data collection module “uploads information to the host module on a periodic basis, at a preset time, or in response to a demand from the host module.” Column 32, lines 31-33. *Cunningham* describes the data collection module as providing “the information transmission connection between the sensor interface module 102 and the network connection 116 to the host module 122.” Column 21, lines 13-16.

While *Cunningham* appears to teach the monitoring and collection of information from the sensor interface, there is no initiation or control of the communication with the

sensor interface by the data collection module. Further, while *Cunningham* appears to teach the forwarding of the collected information to a host (or application server), there is no indication that the data collection module controls that communication beyond the rudimentary levels of forwarding the collected data according to a periodic schedule, a preset time, or in response to a request for data from the host module. So *Cunningham* fails to teach at least the elements of a “site controller configured for controlling communication with the host computer and a plurality of communication devices,” managing “communication with each of the plurality of communication devices,” and managing “communication with the host computer.”

Thus, *Cunningham* fails to disclose, teach or suggest every element of the Applicants’ claimed invention, and thus the rejection of claim 1 under 35 U.S.C. § 102(e) should be withdrawn.

Further, independent claim 23 recites:

23. A site controller for controlling communication with a host computer connected to a first communication network and a plurality of communication devices that define a second communication network associated with a **plurality of remote devices that are to be monitored and controlled by the host computer**, the site controller comprising:

a means for communicating with the plurality of communication devices via the second communication network;

a means for communicating with the host computer via the first communication network;

a means for managing communication with each of the plurality of communication devices, via a first communication protocol, based on one or more communication paths for each of the plurality of communication devices, each communication path comprising one or more communication devices involved in the communication link between the second communications network and each of the plurality of communication devices; and

a means for managing communication with the host computer via a second communication protocol.

(Emphasis added.)

Independent claim 23, as amended, is allowable for at least the reason that *Cunningham* does not disclose, teach or suggest the features that are emphasized in claim 23 above.

Specifically, *Cunningham* states that “the sensor interface module will transmit to the data collection module at pre-defined intervals based on the number of inputs received from the hardware sensor.” Column 14, lines 64-67. *Cunningham* also appears to teach that a sensor interface module can be either “a single path sensor interface module 104 or a multiple path sensor interface module 106.” Column 6, lines 20-22. The difference is that a multiple path sensor interface module may transmit to multiple data collection modules. This apparently allows for multiple paths of data transmission from the sensor interface module, through a data collection module, and ultimately to the host controller (or application server). However, this does not allow for collecting the data if the data collection module(s) that the sensor interface module is/are assigned to have failed; it is also necessary to control and reprogram the remote device(s) automatically.

Further *Cunningham* states that:

The sensor interface module 102 may be programmed by a programming computer ... having a program implemented on a hand held processing or personal computer type of device. At the time of programming the sensor interface module, the programming information is either immediately transferred to the host module for permanent storage, or is maintained in the programming device for a future upload to the host module.

Column 13, lines 57-64.

Cunningham does not appear to teach a means for reprogramming the sensor interface module from a remote host, and therefore any alternative data collection paths or sensor controls would necessarily need to be predetermined at the time of programming. So *Cunningham* fails to teach at least the elements of “a means for managing communication with each of the plurality of communication devices” that are to be “monitored and controlled by the host computer.”

Thus, *Cunningham* fails to disclose, teach or suggest every element of the Applicants’ claimed invention, and thus the rejection of claim 23 under 35 U.S.C. § 102(e) should be withdrawn.

Claim 15

Independent claim 15 recites:

15. A method for controlling communication with a host computer connected to a first communication network and a plurality of communication devices that define a second communication network associated with a plurality of remote devices that are to be monitored and controlled by the host computer, the method comprising the steps of:

determining a unique address for each of the plurality of communication devices by receiving an initialization message;

determining with which of the plurality of communications devices that each of the plurality of communication devices has a communication link;

based on the plurality of unique addresses and which of the plurality of communications devices each of the plurality of communication devices has a communication link with, **determining one or more communication paths associated with each of the plurality of communication devices;**

managing communication with each of the plurality of communication devices, via a first communication protocol, based on one or more of the communication paths associated with each of the plurality of communication devices; and

managing communication with the host computer via a second communication protocol.

(Emphasis Added.)

Independent claim 15, as amended, is allowable for at least the reason that *Cunningham* does not disclose, teach or suggest the features that are emphasized in claim 15 above.

Specifically, *Cunningham* states that the “data collection module 110 acts as the focal point of all the information which is **collected** from the sensor interface modules 102 within a monitored area such as a customer’s premise and **transmits** this information to the host module....” Column 21, lines 19-23. *(Emphasis Added.)* The Office Action alleges that the data collection module manages “communication with each of the plurality of communication devices.” Office Action page 5, lines 17-18 (citing *Cunningham*, column 22, line 8 to column 23, line 57). However, *Cunningham* states that “the microcontroller monitors and controls several flags and the input and output of information **within** the data collection controller system.” Column 23, lines 55-57. *(Emphasis Added.)* Applicants’ respectfully submit that controlling the input and output of information **within** the data collection controller system is not the same as controlling the paths through which that information arrives to the data collection controller system.

Further, *Cunningham* states that:

... one of the multitude of data collection modules 110 will be assigned primary responsibility for any one of the sensor interface modules 102, but any number of data collection modules 110 may be assigned secondary responsibility for any one of the sensor interface modules 102. This method of data transmission allows for an efficient, single-line of communication of messages during normal operation of the system, but allows for multiple paths of data recovery if the system fails during its normal operation.

Column 7, lines 9-18.

But it should also be noted that:

The sensor interface module 102 may be programmed by a programming computer ... having a program implemented on a hand held processing or personal computer type of device. At the time of programming the sensor interface module, the programming information is either immediately transferred to the host module for permanent storage, or is maintained in the programming device for a future upload to the host module.

Column 13, lines 57-64.

Cunningham apparently teaches that secondary data collection module(s) may adapt to receive transmissions from sensor interface modules when the primary data collection module fails, thus allowing data to be transmitted through diverse paths. However, *Cunningham* does not appear to teach a method for reprogramming the sensor interface module from a remote host, and thus any alternative paths through which the sensor interface module may transmit must be predetermined at the time of programming and cannot be managed through a remote host.

So *Cunningham* fails to teach at least the elements of a host computer that “determine[s] one or more communication paths associated with ... the ... communication devices,” and that “manag[es] communication with each of the ... devices.

Thus, *Cunningham* fails to disclose, teach or suggest every element of the Applicants’ claimed invention, and thus the rejection of claim 15 under 35 U.S.C. § 102(e) should be withdrawn.

Claim 2

Because independent claim 1 is allowable over *Cunningham*, dependent claim 2 is allowable as a matter of law for at least the reason that this dependent claim contains all of the elements of the respective independent base claim. *See, e.g., In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Thus, *Cunningham* fails to disclose, teach or suggest every element of Applicants' claimed invention, and thus the rejection of claim 2 under 35 U.S.C. § 102(e) should be withdrawn.

Claims 3, 16 and 24

Because the respective independent claims 1, 15 and 23 are allowable over *Cunningham*, dependent claims 3, 16 and 24 are allowable as a matter of law for at least the reason that these dependent claims contain all of the elements of their respective independent base claims. *See, e.g., In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Yet, claims 3, 16 and 24 are allowable for additional reasons.

Dependent claim 3 recites:

3. The site controller of claim 1, wherein each of the plurality of communication devices are wireless communication devices, **the plurality of wireless communication devices being disposed throughout a geographic area such that the antenna patterns associated with the plurality of wireless communication device overlap to create a coverage area that defines the second communication network.**

(Emphasis Added.)

Dependent claim 3 is allowable for at least the reason that *Cunningham* does not disclose, teach or suggest the features that are emphasized in claim 3 above.

More specifically, *Cunningham* appears to teach that the sensor interface modules may be either "a single path sensor interface module 104 or a multiple path sensor interface module 106." Column 6, lines 20-22. Further, *Cunningham* appears to teach that the difference between a single path sensor interface module and a multiple path sensor interface module

... is the number of data collection modules 110 receiving the ... transmission 108 from the individual sensor interface modules 102. Single path sensor

interface modules 104 communicate ... to only one of the data collection modules 110. Multiple path data collection modules 106 transmit ... to multiple data collection modules 110.

Column 6, lines 24-31.

Applicants note that the quoted text above that reads “Multiple path data collection modules 106 transmit” should apparently read “Multiple path sensor interface modules 106 transmit” in order to be consistent with the teachings of *Cunningham*. Applicant respectfully submits that a single path sensor interface module that may communicate to only one of the data collection modules negates the benefit of overlapping antenna patterns associated with a wireless communication device to create a coverage area that may extend to multiple data collection modules or site controllers. The same reasoning applies to claims 16 and 24.

Thus, *Cunningham* fails to disclose, teach or suggest every element of the Applicants’ claimed invention, and thus the rejection of claims 3, 16 and 24 under 35 U.S.C. § 102(e) should be withdrawn.

Claims 4, 17 and 25

Because the respective independent claims 1, 15 and 23 are allowable over *Cunningham*, dependent claims 4, 17 and 25 are allowable as a matter of law for at least the reason that these dependent claims contain all of the elements of their respective independent base claims. *See, e.g., In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Thus, *Cunningham* fails to disclose, teach or suggest every element of Applicants’ claimed invention, and thus the rejection of claims 4, 17 and 25 under 35 U.S.C. § 102(e) should be withdrawn.

Claim 6

Because independent claim 1 is allowable over *Cunningham*, dependent claim 6 is allowable as a matter of law for at least the reason that this dependent claim contains all of the elements of the respective independent base claim. *See, e.g., In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Thus, *Cunningham* fails to disclose, teach or suggest every element of Applicants' claimed invention, and thus the rejection of claim 6 under 35 U.S.C. § 102(e) should be withdrawn.

Claims 7 and 27

Because the respective independent claims 1 and 23 are allowable over *Cunningham*, dependent claims 7 and 27 are allowable as a matter of law for at least the reason that these dependent claims contain all of the elements of their respective independent base claims. *See, e.g., In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Thus, *Cunningham* fails to disclose, teach or suggest every element of Applicants' claimed invention, and thus the rejection of claims 7 and 27 under 35 U.S.C. § 102(e) should be withdrawn.

Claim 8

Because independent claim 1 is allowable over *Cunningham*, dependent claim 8 is allowable as a matter of law for at least the reason that this dependent claim contains all of the elements of the respective independent base claim. *See, e.g., In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Dependent claim 8 recites:

8. The site controller of claim 1, wherein **the logic configured to manage communication with each of the plurality of communication devices comprises one or more look-up tables residing in a memory.**

(Emphasis Added.)

Dependent claim 8 is allowable for at least the reason that *Cunningham* does not disclose, teach or suggest the features that are emphasized in claim 8 above.

The Office Action alleges that *Cunningham* discloses "one or more look-up tables residing in memory." Office Action page 7, lines 1-2 (*citing Cunningham*, Column 31, lines 6-17). Specifically, *Cunningham* teaches:

Information from the sensor interface module 102 is decoded and processed in the data collection module 110 **and prepared for transmission to the host module.** The processor dynamically builds a table that stores the information

received from each of the interface modules. Information is grouped by the unique identifier assigned to each individual sensor interface module.

Column 31, lines 6-12. (*Emphasis Added.*)

Thus, the data collected from the sensors is assembled into a table in preparation for transmission **to the host module**. Applicant respectfully submits that *Cunningham* teaches a system for **managing the communication of data from** the sensor interface modules, but does not address the use of that same lookup-table for **managing the communication of data to** the sensor interface modules.

Thus, *Cunningham* fails to disclose, teach or suggest every element of Applicants' claimed invention, and thus the rejection of claim 8 under 35 U.S.C. § 102(e) should be withdrawn.

Claims 10, 11 and 21

Because the respective independent claims 1 and 15 are allowable over *Cunningham*, dependent claims 10, 11 and 21 are allowable as a matter of law for at least the reason that these dependent claims contain all of the elements of their respective independent base claims. *See, e.g., In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Thus, *Cunningham* fails to disclose, teach or suggest every element of the Applicants' claimed invention, and thus the rejection of claims 10, 11 and 21 under 35 U.S.C. § 102(e) should be withdrawn.

Claim 12

Because independent claim 1 is allowable over *Cunningham*, dependent claim 12 is allowable as a matter of law for at least the reason that this dependent claim contains all of the elements of the respective independent base claim. *See, e.g., In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Thus, *Cunningham* fails to disclose, teach or suggest every element of the Applicants' claimed invention, and thus the rejection of claim 12 under 35 U.S.C. § 102(e) should be withdrawn.

Claim 20

Because independent claim 15 is allowable over *Cunningham*, dependent claim 20 is allowable as a matter of law for at least the reason that this dependent claim contains all of the elements of the respective independent base claim. *See, e.g., In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Dependent claim 20 recites:

20. The method of claim 15, further comprising the steps of: receiving a request, via the first communication network, from the host computer for information related to one of the plurality of remote devices; **providing a command message to the second communication network for delivery to the one of the plurality of remote devices** based on one of the communication paths associated with the communication device corresponding to the one of the plurality of remote devices.

(*Emphasis Added.*)

Dependent claim 20 is allowable for at least the reason that *Cunningham* does not disclose, teach or suggest the features that are emphasized in claim 20 above.

Specifically *Cunningham* appears to teach that the data collection module maintains the most current information received from the sensor interface modules and also that the “values are stored for local display and for possible **transmission to the host module upon request.**” Column 32, lines 22-24. Further, *Cunningham* states that:

[t]he host module **receives the information** from the sensor interface module through the data collection modules. The data collection module information is transmitted over commercial carriers, and **collected for processing by the host module.** The host module then uses application software to **compile the information into a user specified readable format.** This information may then be **made available to the customer.**

Column 44, lines 26-33. (*Emphasis Added.*)

Also, *Cunningham* states that:

[t]he **host module receives data from a plurality of sensor interface modules** The host system validates the data and **passes the validated data to an internal data base....** The **data is stored and available to the customers** as needed. The host module uses this internal data base to provide information which is **processed for communication transmission at the customer’s request.**

Column 44, lines 54-64. (*Emphasis Added.*)

Finally, *Cunningham* also states in summary that:

[t]he data collection modules 110 **transmit information to the host module.**
In the preferred embodiment, the data collection modules **transmit the information** through a commercial network **to the host module.**
Alternatively, the **host module can request updates** from the data collection module as needed.

Column 45, lines 54-59. (*Emphasis Added.*)

The above emphasized sections show that *Cunningham* appears to teach the monitoring of data collected from the sensor interface devices and then the transmission of that information to the host module. The host module may also request updates from the data collection module. However, the transmission of command messages for delivery to the remote devices is not addressed. As noted previously, *Cunningham* appears to teach that the sensor interface module must be programmed in the field. So *Cunningham* fails to teach at least the element of “providing a command message to ... one of the ... remote devices.”

Thus, *Cunningham* fails to disclose, teach or suggest every element of Applicants’ claimed invention, and thus the rejection of claim 20 under 35 U.S.C. § 102(e) should be withdrawn.

Response to 35 U.S.C. § 103(a) Rejection

Claims 5, 9, 13, 14, 18, 19 and 26 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Cunningham* as applied to claims 1-4, 6-8, 10-12, 15-17, 20-25 and 27 in view of Johnson et al. (U.S. Patent No. 5,673,252, hereinafter referred to as *Johnson*). Applicants respectfully traverse this rejection because independent claim 15, as amended, and independent claims 1 and 23 are allowable over *Cunningham*, as discussed above. Therefore dependent claims 5, 9, 13, 14, 18, 19 and 26 are allowable for at least the reason that these dependent claims contain all elements of their respective independent base claims. *See, e.g., In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). In addition to the foregoing reasons, claims 5, 9, 13, 14, 18, 19 and 26 are patentable for at least the reasons discussed below.

It is well established at law that, for a proper rejection of a claim under 35 U.S.C. § 103 as being obvious based upon a combination of references, the cited combination of

references must disclose, teach or suggest either implicitly or explicitly all elements, features or steps of the claim at issue. *See e.g., In re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988), and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).

Claims 5, 18 and 26

Regarding claims 5, 18 and 26, the combination of *Cunningham* and *Johnson* does not disclose, teach or suggest a data packet containing “a to address” as recited in claims 5 and 18. Further, the combination of *Cunningham* and *Johnson* does not disclose, teach or suggest “a means for identifying intended recipients” as recited in claim 26.

The Office Action alleges that *Johnson* discloses a data packet that includes “a to address” field. However, Fig. 3 of the *Johnson* patent discloses a “service module address” field. Applicants respectfully submit that the “service module address” field is the address of the network service module as disclosed in *Johnson*, and cannot provide “a to address” for packets collected from the Network Service Module. Thus, for these reasons, claims 5, 18 and 26 are allowable over the combination of the *Cunningham* and *Johnson* patents.

Claims 9, 19 and 26

Regarding claims 9, 19 and 26, the combination of *Cunningham* and *Johnson* does not disclose, teach or suggest “a packet number field” as recited in claims 9 and 19. Further, the combination of *Cunningham* and *Johnson* does not disclose, teach or suggest “a means for indicating a length of a packet” as recited in claim 26.

The Office Action alleges that *Johnson* discloses a data packet that includes “a packet number field.” Specifically, *Cunningham* teaches a “counter which keeps track of the switch closures.” Column 14, lines 47-48. Applicants respectfully submit that this is a portion of the data that is being collected from the sensor interface module and is therefore not “a packet number field.” Applicants further submit that there is no discussion in the *Johnson* patent regarding a packet number field in the data packet collected from the network service module. Thus, for these reasons, claims 9, 19 and 26 are allowable over the combination of the *Cunningham* and *Johnson* patents.

Claims 13 and 14

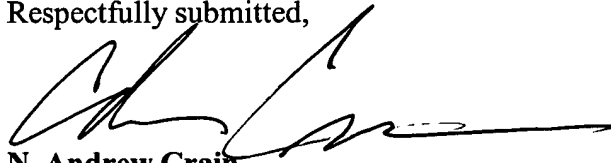
Regarding claims 13 and 14, the combination of *Cunningham* and *Johnson* does not disclose, teach or suggest “a second communication identifier” as recited in claims 13 and 14. As noted previously, the “service module address” field is the address of the network service module as disclosed in *Johnson*, and cannot provide “a to address” for packets collected from the Network Service Module. As such, applicants respectfully submit that this field cannot also be a “second communication identifier” as recited in claims 13 and 14. Thus, for these reasons, claims 13 and 14 are allowable over the combination of the *Cunningham* and *Johnson* patents.

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that all objections and rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1-27 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

If, in the opinion of the Examiner, teleconference would expedite the examination of this matter, the Examiner is invited to contact the undersigned agent at (770) 933-9500.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'N. Andrew Crain', with a long horizontal flourish extending to the right.

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